DOCUMENT RESUME

ED 158 701 IR 005 791

AUTHOR	Emrick, John A.; Peterson, Susan M.
TITLE	A Synthesis of Findings Across Five Recent Studies of Educational Dissemination and Change. Executive Summary (Management version) (Policy version).
INSTITUTION	Far West Lab. for Educational Research and Development, San Francisco, Calif.
SPONS AGENCY	National Inst. of Education (DHEW), Washington, D.C.
PUB DATE	Jan 78
CONTRACT	400-76-0050
NOTE	26p.; Pages 1-9 of the Policy Version are omitted as they are identical to the same pages in the Management Version
AVAILABLE FROM	Educational Dissemination System Support Program, Far West Laboratory for Educational Research and Development, 1855 Folsom, San Francisco, California 94103 ($2.00 prepaid)
EDRS PRICE	MF-$0.83 HC-$2.06 Plus Postage.
DESCRIPTORS	Educational Administration; *Educational Change; Educational Needs; Educational Policy; *Educational Research; Educational Researchers; Guidelines; *Information Dissemination; Information Utilization; Management Information Systems; *National Surveys; *State of the Art Reviews; *Synthesis

ABSTRACT

Five recent large-scale investigations of educational dissemination and change in American schools are reviewed, consolidated, and synthesized to derive a set of conclusions regarding the current state of knowledge for policy makers, program administrators, and researchers. The material is presented as an executive summary in similar management and policy versions. Two key conclusions drawn from this synthesis are that some form of personal intermediary or linkage is essential to the dissemination process, and that a relatively comprehensive yet flexible external support system is needed to provide crucial materials and in-person utilization assistance. Implications are derived from these conclusions for dissemination-related policy, administration/management, and research and evaluation. Guidelines provided for an effective dissemination/utilization program are based on components of successful approaches to dissemination and change identified in reviewing the five studies. (Author/CHV)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED158701

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY.

A SYNTHESIS OF FINDINGS ACROSS FIVE RECENT STUDIES OF EDUCATIONAL DISSEMINATION AND CHANGE

EXECUTIVE SUMMARY

(MANAGEMENT VERSION)

John A. Emrick

and

Susan M. Peterson

January 1978

FAR WEST LABORATORY
FOR EDUCATIONAL RESEARCH AND DEVELOPMENT

1855 FOLSOM STREET • SAN FRANCISCO, CALIFORNIA 94103 • (415) 565-3000

IR005791

The report summarized here is one in a series of occasional papers which has resulted from a collaborative effort between the Consumer Information Branch of the School Practice and Service Division of the National Institute of Education and the Far West Laboratory for Educational Research and Development. Each paper in the series will be related to some aspect of the dissemination and utilization of educational information and will reflect both NIE's and Far West Laboratory's continuing interest and activities in this area of educational research. In some instances the papers will be prepared by FWL research staff; in others, FWL will commission papers by practitioners and scholars in the field. Many of the papers will provide the basis for, or will be the result of, a series of dissemination conferences involving educational dissemination sponsors, dissemination project managers and staffs, and school practitioners concerned with educational improvement based on the results of educational research and development.

Copies of the full report are available at cost. Send order ($2.00 per copy), accompanied by check or money order payable to Far West Laboratory, to:

Educational Dissemination System Support Program
Far West Laboratory for Educational Research and Development
1855 Folsom
San Francisco CA 94103

This project has been supported with Federal funds from the National Institute of Education, Department of Health, Education, and Welfare, under Contract # 400-76-0050. The contents of this publication do not necessarily reflect the views or policies of the Department of Health, Education, and Welfare and the National Institute of Education, nor does mention of trade names, commercial products, or organizations imply endorsement by the U.S. Government or the Far West Laboratory.

CONTENTS

INTRODUCTION 1

CROSS STUDY ISSUE SYNTHESIS 6

CONCLUSIONS AND IMPLICATIONS 10

Policy Implications 10

Management Implications 10

Research Implications 16

INTRODUCTION

Whereas the 1960s can be characterized as a period of intensive efforts to research and develop ways of improving educational practices and procedures, in the 1970s concern has broadened to include issues of how to improve the flow of knowledge and the transfer of technology to local schools. This report represents an effort to review, consolidate, and synthesize findings across a sample of significant recent investigations of educational dissemination and change in American schools.

The goal of this synthesis is to review the evidence from a selected set of recent large-scale investigations of educational change, and from these studies to derive a set of conclusions regarding the current state-of-knowledge and understanding of this phenomenon. We have assumed that our primary audience would be those involved in research on the improvement of ecucation, those involved in designing and carrying out programs to assist in the spread of such knowledge and improvement-oriented change, and those who make policy or allocate resources to facilitate this knowledge production/utilization process.

These five studies are included in this synthesis:

- Sieber, S.D., Louis, K.S., and Metzger, L. The Use of Educational Knowledge: Evaluation of the Pilot State Dissemination Program (two volumes). Columbia University, Bureau of Applied Social Research, New York, N.Y., 1972 (ED 065 739; ED 065 740).

- Berman, P., McLaughlin, M.W., et al. Federal Programs Supporting Educational Change (eight volumes). Santa Monica, CA: Rand Corporation, 1975 (Volumes 1-5); 1977 (Volumes 6-8).

- Stearns, M.S., and Norwood, C.R. Evaluation of the Field Test of Project Information Packages (two volumes). Menlo Park, CA: Stanford Research Institute, 1977.

- Emrick, J.A., with Peterson, S.M., and Agarwala-Rogers, R. Evaluation of the National Diffusion Network (two volumes). Menlo Park, CA: Stanford Research Institute, 1977.

- Moore, D.R., et al. Assistance Strategies of Six Groups that Facilitate Educational Change at the School/Community Level (three volumes). Chicago, IL: Center for New Schools, 1977.

These studies were selected on the basis of scope, relevance, methodology, and availability. That is, each of the studies was national in scope, each investigated one or more relatively distinct dissemination strategies, each involved in-depth case study components focusing on process-outcome relationships, and final reports and appendix materials were available for review and synthesis.

We have attempted to consolidate findings and implications around a common issue of interest to policymakers, program administrators, and researchers alike: What can be learned from these studies regarding processes and procedures that facilitate knowledge diffusion and utilization in schools? We recognize that several other large-scale investigations relevant to this issue are currently underway.* Still, we argue that the major findings from the collection of studies listed above provide sufficiently detailed and cohesive evidence to constitute a valid base for further policy, program, and research planning.

---

*Relevant studies still in progress and thus unavailable for inclusion in this synthesis include the Evaluation of the PIP Diffusion Contractors (AIR), the Evaluation of the Bilingual PIPs (RMC), the Documentation and Technical Assistance project (CNS/CEPM), the State Capacity-Building Project evaluation (NTS), and the R&D Utilization Study (ABT).

Assumptions and Procedures

a) We prepared a brief synopsis of each study in a common format and level of discourse to provide readers with essential study facts relevant to this synthesis. Table 1 summarizes the study facts presented.

b) We define educational change as the implementation of practices or procedures in response to the dissemination of new knowledge. Thus, we do not consider the mere "spread" or "sharing" of information to constitute knowledge utilization (although they may constitute important components in the process). Rather, it is the conditions and "transactions" that increase the likelihood of improvement-oriented change that constitute the subject of this synthesis.

c) Our discussion of the "conditions and transactions" effecting knowledge utilization and change is meant to be neither definitive or exhaustive. As will become clear, much remains to be investigated. Still in our opinion, the convergence of evidence from these ostensibly disparate studies is compelling and reassuring, and this new knowledge has implications for improving future policy, programs, and research regarding educational improvement.

Table 1

SUMMARY OF STUDY FACTS

STUDY	BRIEF DESCRIPTION OF PROGRAM UNDER INVESTIGATION	KEY PROGRAM ASSUMPTIONS*	BASIC STUDY METHODOLOGY
SIEBER: PILOT STATE DISSEMINATION PROJECT	Seven Educational Extension Agents worked in LEAs within three states to link school personnel with ERIC-type resource bases. (2-year-study)	Schools need assistance in identifying needs and in locating resources to meet their needs. Intermediaries are necessary to link school personnel to resources bases (ERIC). Successful linkage will result in further knowledge utilization and further subsequent use of the resource base.	Extended field observation of linker and information retrieval operations within each state. Event-linked survey of LEA clients and responses to client requests. Limited statistical analysis of survey data. Case study and descriptive analysis of field observation data.
RAND: EVALUATION OF FEDERAL CHANGE AGENT	Four categorial programs (ESEA III, VII, Vocational Education and Right-to-Read) provided grants to LEAs to stimulate innovation and change. (3-year-study)	Schools lack necessary slack resources to deal with program deficits and improvement needs. Federal "seed money" grants will stimulate problem solving behavior, R&D products and services, especially the use of successful practices and innovations will be continued after withdrawal of federal support.	Phase I: in-person questionnaire survey of grant recipients at 293 LEAs, followed by in-depth study of 25 sites. Regression analysis of survey data, coupled with qualitative analysis and synthesis of case study data. Phase II: follow-up visits to 100 Title III sites and 11 Title VII sites.
PIP: EVALUTION OF TRYOUT FIELD TEST	Six exemplary projects in reading and math were packaged for replication. 19 tryout sites received grants to replicate the projects on the basis of packaged materials alone. (2-year-study)	Schools are anxious to replace ineffective practices, can assess their needs and interests against available projects and make appropriate selections, that essential features of effective projects can be described by materials, that required staff exist in LEAs, that project replication will result in impact replication, and that PIPs will become cost effective by reducing implication time, costs and uncertainty.	Intensive survey of teachers, administrators, parents and pupils at end of years 1 and 2. Detailed observation and interview of staff and project operations (training, start-up, operations) years 1 and 2. Discrepancy analysis of implementations. Norm-referenced and curriculum referenced analyses of pupil learning. Qualitative analysis and synthesis of pupil affect, parent, teacher, and administrator survey measures and case studies.
NDN: EVALUATION OF NATIONAL DIFFUSION NETWORK	Discretionary grants were provided to developers of exemplary innovations to support demonstration sites and related dissemination activities. Grants were also provided to state and regional intermediaries to facilitate the diffusion and adoption of Developer projects. A national "Network" was created. (1-year study)	A configurational approach involving interpersonal transactions, on-site assistance and coordination among two types of intermediaries (Developers and Facilitators) is required for widespread adoption of program improvements. Both materials and in-person assistance are needed. The Developer is the best implementation assistant, LEAs should be offered choice from an array of "validated" projects, and secondary spread will occur for well rooted adoptions.	Baseline survey of 1,306 client LEAs and an overlapping year-end survey of 1,460 clients to assess initiation, implementation and continuation processes and events. Extensive survey of all change agents. Case studies of 32 change agents and 35 adopters. Case studies of conferences, training, and teacher assistance components. Multiple regression and qualitative analysis and synthesis of data.
TAG: CASE STUDIES OF STRATEGIES	Six "successful" educational change (technical assistance) projects were studied in depth to identify common and unique features of their assistance strategies. (1-year-study)	School change must be viewed from a social systems perspective in terms of rules, norms, functional subsystems, routines, decision rules and standard operating procedures. Personal contact is the key influence in the adoption/implementation process, and mutual adaptation is required.	In-depth six-week case study of each of the six TAGs.

Table 1, concluded

STUDY	KEY FINDINGS
SIEBER: PILOT STATE DISSEMINATION PROJECT	Field agents achieved a substantial impact in terms of increasing school personnel's use of external information resources. Impact of the information on school/classroom practices is uncertain. Factors contributing to agents' success were: (1) their status as generalists; (2) their position outside the target systems; (3) their lack of power to mandate change. Major problem areas were: (1) agents' underinvolvement in local change efforts; and (2) internal management of the state-level projects.
RAND: EVALUATION OF FEDERAL CHANGE AGENT PROGRAMS	Federal seed money programs stimulated initiation of a large number of local efforts consistent with program guidelines. Success of implementation was due mainly to local considerations, including: (1) motivation for initiation; (2) scope of change attempted; (3) implementation strategy; (4) level of institutional support. Continuation of programs after the withdrawal of federal money occurred at the classroom and/or the district level. Full institutionalization (long-term survival of the programs) was found in very few districts.
PIP: EVALUATION OF TRYOUT FIELD TEST	The six Project Information Packages tested were effective devices for communicating management aspects of projects that make use of straightforward commercial materials and familiar instructional techniques. However, structural replication of the management features of an effective project did not guarantee replication of the original instructional program or of the student achievement gains realized at the original site.
NDN: EVALUATION OF NATIONAL DIFFUSION NETWORK	The approach appears highly effective in creating LEA awareness, interest, and subsequent implementation of innovations being diffused. Factors accounting for successful adoptions were: (1) thorough, persistent, and well-differentiated awareness activities; (2) early involvement of administrative and instructional decision makers and emphasis on local commitment; (3) extensive use of in-person tactics at all stages of the adoption process, including follow-up visits; (4) provision of comprehensive and well-developed materials to support adoptions; (5) personal dynamics of the Developer and management skills of the Facilitator; (6) Emphasis on practitioner change, phase-in of implementation, and low reliance on expensive resources (7) support of LEA visits to demonstration sites. Adoption patterns appeared reasonably uniform by innovation type and geographic area, but disproportionate in terms of school level and district urbanism. Much of the overall NDN success is attributed to effort and enthusiasm of participating change agents.
TAG: CASE STUDIES OF STRATEGIES	Major conclusions are that successful TAGs: (1) consist of small, cohesive staff; (2) developed stylized approaches on trial-and-error basis over a period of years (generally 6 or more); (3) interact with schools as social systems; (4) develop and make use of extensive materials; (5) learn and make use of client language when providing assistance; (6) continually revise and adapt their assistance tactics on the basis of experience. The typical successful TAG is described as a "family" operation with the parent (leader) having ultimate authority. Staff roles and functions are clarified and codified. New staff are selected and socialized into the TAG, generally requiring 2-3 years.

CROSS STUDY ISSUE SYNTHESIS

Each of the studies included in this synthesis began with somewhat distinct assumptions of how the dissemination of knowledge should relate to or affect subsequent change at the school level, and the extent to which these key assumptions have been articulated varies considerably. Although the influence of models such as the Innovation/Diffusion Model (Rogers), or the RDDA or Market Model (Havelock, Hood) is clearly seen to differ across programs, none of these major programs exactly corresponds to any single model of dissemination and change prevalent at the time of the study. The important point, in our opinion, is that regardless of the initial theoretical orientation the major program studies reach consensus on a number of conclusions regarding the relationship between dissemination and change. These conclusions are synthesized below, and subsequent conclusions and implications are suggested.

Information alone will not likely affect much "change-oriented" utilization. Evidence from all five studies suggests that, if the goal of a dissemination effort is to induce change, something more than an information network or resource system (e.g., ERIC) is necessary. This assertion is not intended to negate the value of printed information. However, it seems clear that some form of personal intervention is usually necessary to generate interest among school personnel and to initiate and sustain the utilization process.

The quality and availability of materials play a central role in supporting and maintaining dissemination effects. This generalization does not contradict the previous assertion that the availability of information, by itself, is not sufficient to produce utilization. Rather, it asserts that qualitative aspects of materials profoundly influence patterns

of utilization, and that materials constitute a necessary component of any serious dissemination program. The mere provision of information resources and materials constitutes a poor dissemination strategy, especially if utilization is the objective. The opposite appears equally true: An interventionist or change advocate will have little success in effecting utilization and change without supporting materials!

The intermediary needs hard copy to back up innovative ideas. All the studies show that as these materials become more complete, comprehensive, and sophisticated, they become more potent in effecting and sustaining the intended utilization. There is strong evidence, then, for a materials/in-person interaction model of dissemination effectiveness. To the extent that either is missing, the dissemination effort seems to result in under-utilization.

Utilization seems to require more than easy access to information and resources. Evidence from the five studies suggests that dissemination systems designed around the notion that schools behave as rational, information-seeking consumers will have very limited success. An argument might be made that our evidence simply shows that systems based on a "marketing" approach lack some necessary components and that once these are supplied, a "marketing" approach will appear more viable. However, the favorable evidence for alternative approaches, coupled with evidence from the Sieber and Rand studies, leads us to discard a conventional marketing approach as unproductive. This does not mean that support elements that make up such an approach (e.g., ERIC) should be abandoned. Rather, it suggests that serious efforts to effect improvement-oriented change in schools will require more than the existence and availability of information and resources.

Interpersonal or social influences appear to be the prime determinants of utilization. A very complex picture of schools and how they interact with external human and information resources emerges from these five studies. First, they are not active, but reactive. Schools operate as loosely coupled social bureaucracies. As such, their modus operandi is "status quo" unless externally imposed incentives and resources impinge on them. They are not striving, "success oriented," continually improving, self-organizing systems. In a sense, schools present an enigma--they are almost totally beyond control, either external or internal, at the basic operational level of instruction. Hence, they are exceedingly difficult to change toward specific ends, particularly from the outside.

The central thesis of this issue statement is that knowledge utilization is initiated primarily from incentives created by an interventionist's social interaction with local school staff. The Sieber, NDN, and TAG studies all point to the importance of the interventionist's interpersonal skills and ability to establish collegial relationships with his/her clients and to provide both role models and incentives to participate.

Our evidence indicates that the successful change process is dominated by mutual self-interest. The interventionists expend energy and resources competing for clients and often must focus on only a few of many opportunities in order to establish strong sharing relationships with local staff. Consequently, they learn to protect their investments. Similarly, local staff resist changing in any substantial way what they are already routinely doing. Change requires work, involves risks, and seldom offers clear immediate advantages. Both the change agent and the local staff must be satisfied that their interests are protected before the change process commences.

Qualitative more than tactical aspects will determine the effects of a dissemination strategy. What is done and when it is done does not appear nearly as important as who does it and how it is done. Four qualitative aspects appear to be predominant across the studies.

Interpersonal style of both the intermediary and instructional staff in terms of human relations skills and organizational attachments contributes more to effectiveness than do knowledge and expertise.

Local commitment was invoked by all the studies as the single most powerful explanatory variable of outcomes. The components most instrumental in the development of this commitment were personal issues such as interpersonal style and constructs such as "ownership," "involvement," "growth experience," and "problem-solving". Following this were professional and technical issues; least important were institutional issues such as compliance with mandated change.

Training of both intermediaries and local staff seems to be a crucial aspect regardless of the dissemination objective. Although some skill development and refinement is attempted, on the whole training more often appears to consist of selection and socialization in terms of values, philosophy, style, etc., primarily through role models, demonstrations, and guided experience. How this training is structured or how it is sequenced does not seem to matter. What seems more important is the fairly continuous involvement and interaction of the trainer and trainee in effecting some technology transfer.

The utilization phenomenon is a gradual but cumulative process. Little can be gained by attempting to accelerate this process.

CONCLUSIONS AND IMPLICATIONS

We have drawn two key conclusions from this synthesis:

1. Some form of personal intermediary or linkage is essential to the dissemination process.
2. A relatively comprehensive yet flexible external support system is needed to provide crucial materials and in-person utilization assistance.

From these conclusions and the findings on which they are based, implications can be derived for dissemination-related policy, administration/management, and research and evaluation.

Policy Implications

1. The wide scale dissemination and utilization of relevant new knowledge requires considerably more time and resources than planners previously have anticipated.
2. In turn, the increased time and resources needed suggest that a requirement exists for some central process by which the relevance of new knowledge can be established, utilization priorities can be set, and the level of support for dissemination can be determined.
3. Some form or system of intermediaries or knowledge linkers should be established.

Administrative/Management Implications

1. Effective operations seem to depend on a balance between size and organizational complexity. The synthesis seem to indicate that small is better. In fact, the limits of effective operations may be as few as ten

staff. Furthermore, organizational diversification or departmentalization of staff seems somewhat counterproductive. This phenomenon was most evident in analysis of certain TAG and NDN activities in which large staffs were organized into nonoverlapping functions (e.g., development versus deployment versus evaluation). Such role distinctions apparently led to discontinuities and overspecialization such that field intermediaries experienced problems in relating to clients. Intermediaries became overly specialized and isolated from their colleagues; they also experienced considerable difficulty in adapting to varying client interests and priorties.

On the other hand, projects in which all staff members were involved in all aspects of operations (even though they may have specialized in a particular area) were highly successful. The staffing phenomenon seems to be a process of socialization and role negotiation. A manager/leader is needed to select compatible staff, to direct their socialization, and to ensure the cohesiveness of the operation. The most effective intermediaries display a sense of identity with their "family" (i.e., their project); we believe that there is a tradeoff between family size and the qualities of this socialization.

This analysis leads us to speculate that linkage programs organized at the intermediate agency level will operate more effectively than larger units organized at state or national levels, or small independent operations at district levels. The essential requirement seems to be that, however organized, staff size be conducive to a "family" operation.

2. The recruitment, selection and training of staff is highly complex. Many of the projects included in the NDN and TAG studies reported a certain degree of staff turnover. We suspect that these projects discovered by trial and error how to select and train their staff and how to select out incompatible members. Effective projects operated as highly cohesive

teams. To some extent team members were obtained through personal referral networks or by self-selection processes. All seem to have social action orientations, plus actual job experience in the client system. It would be interesting to experiment with the introduction and development of a linker training curriculum in institutions of higher education.

3. Materials development and provision represents a complex and crucial component of an effective linker operation. Materials are needed both to describe the linker services and to present the knowledge to be disseminated to clients. The linker concept certainly offers an exciting potential for retrieving and translating ERIC source material for school users. This implies some sophistication in materials development capability may represent a critical skill in effective intermediary programs. Whether this materials resource can be provided through agencies external to the intermediary project needs to be investigated.

Guidelines for an Effective Dissemination/Utilization Program

In addition to the general issues of program management discussed above, our review of the five studies has identified a number of components that, we conclude, characterize successful approaches to dissemination and change. These components appear to lead to (or to increase the quality of) intended consequences of the programs. Some of these components are better understood or have been more carefully investigated than others. Accordingly, many of the "recommendations" for dissemination programs offered below are propositions for further investigations:

a) Identify and gain access to targets by means of the personal referral networks and informal communication channels existing within the client social system. Although formal dissemination systems (ranging from "top down" campaigns to direct mail, broad outreach tactics) will

produce some impacts, they will be spotty and unsystematic and will include a large proportion of false starts. By contrast, the personal referral systems and social networks will provide low-energy access to targets with a much higher rate of intended consequences.

b) Use in-person (preferably face-to-face) communications, with accompanying "hard copy" materials. Both telephone and face-to-face contacts produce much stronger consequences than any other approach. Combining an in-person approach with use of the client referral network will produce an exceptionally high response to the dissemination efforts, and will have the most predictable and controllable consequences in terms of subsequent utilization.

c) Attend to and differentiate the organizational/bureaucratic nature of the client (school) systems. Schools are complex, loosely coupled institutions with few incentives to change. The nature of useful information and assistance will vary conciderably from one level in the organizational structure to another.

d) Target the primary point of entry at the organizational level most proximate to the intended locus of impact. Information and assistance intended for teachers should be targeted to teachers--not administrators--and vice versa. Teacher organizations as an input and targeting channel have been generally underutilized.

e) Provide for and secure prior informed concurrence of all administrative levels <u>above</u> the level of primary interface. Informed concurrence often requires only a brief conversation with central, intermediate, and state level administrative officers. If no action or resource provisions on their part are required, and if they stand to benefit (even remotely), concurrence will be easy to obtain. However, if prior concurrence is not obtained, chances for utilization at the target level are remote.

f) Make use of change agents, interventionists, linkers, facilitators, intermediaries, assistance groups, advocates (or whatever their title!) who are most homophilous with the target subculture. Basically, the intermediary must be both familiar and compatible with norms, values, conventions, and social characteristics of the client subculture. Parents work best in effecting parent involvement, teachers identify best with other teachers (or those with extensive teaching experience), administrators relate to administrators, etc. It is next to impossible to "fake" homophily. Client attributes, awareness, and sensitivity must be genuine.

g) Ensure that all transactions between the intermediary and the client are coherent and coordinated with the general goals of the dissemination program. The assumption that the target clientele understand problems and shortcomings of a dissemination effort is both false and disastrous in its consequences. The intermediary is an alien to the target social system. It is crucial that the intermediary group have its "act" together and that all transactions are well coordinated across individual agents. The single most damaging error an intermediary can make is to fail to deliver or to meet a commitment (follow-up contact, delivery, or whatever). Also, all transactions should be fully coordinated with the relevant administrative levels--both in the target organization and in the intermediary organization.

h) Provide opportunities for choice in the content and style of target group involvement. To the extent that clients are offered choices, they will make decisions and thereby increase their level of participation and involvement. The intermediary must be prepared for rejection by one or more target clients.

i) Focus on a limited number of clients, at least 25 percent fewer than can be "comfortably" accommodated at any one time. Overcommitment

of intermediaries, or overly ambitious dissemination programs, is a common and serious strategic error. By intentionally "undershooting," the intensity of transactions will increase and the incidence of problems (which spread by word of mouth faster than do successes) will be under more direct control of the intermediary. Maximizing the ratio of successes to involvements will enhance the legitimacy of the effort. Firmly rooting the utilization will generate an advocate of the system--the well-served client.

j) Place early emphasis on the philosophy and ideology of the information, products, or services being disseminated. To the extent that the consciousness of the clients can be raised and the professional and personal advantages identified, a sense of enthusiasm and motivation will emerge among clients.

k) Make early use of concrete experiences, assignments, materials, and utilization-relevant activities. Initial client involvement activities are crucial. Clients will expect directions and expertise from the intermediary. Continued transactions will depend primarily on impressions and level of activity during the initial encounter. Doing something is essential.

l) Provide repeated in-person transactions with the client staff. One-shot or "hit-and-run" transactions will not produce sustained utilization. A distributed program of transactions graduated in terms of the type of utilization involved will be required. The extent and magnitude of this program will, of course, vary in terms of the dissemination program goals.

m) Anticipate that utilizations involving some form of implementation process will be gradual and cumulative. Nearly all studies show that two

or more years are required before any new practice or procedure stabilizes. The first year is usually a period of becoming familiar with the mechanics, the "what, when, and how." Subsequent years involve internalization, accommodation, refinement, and further diffusion. The process is slow and requires rather continuous attention and support at the early stages. As the local staff gain experience with new procedures, external support can be withdrawn gradually.

Research Implications

1. The most critical need is for improved knowledge of the interpersonal referral networks, subcultures, and decision-making structures characterizing all aspects of American school systems.
2. More detailed knowledge is needed about the prerequisites, appropriate training procedures, and materials requirements for developing effective intermediaries.
3. More definitive evidence is needed about the adoption/utilization process and the range and extent of its consequences on school functioning and effectiveness.

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

A SYNTHESIS OF FINDINGS ACROSS FIVE RECENT STUDIES OF EDUCATIONAL DISSEMINATION AND CHANGE

EXECUTIVE SUMMARY

(POLICY VERSION)

John A. Emrick

and

Susan M. Peterson

January 1978

FAR WEST LABORATORY
FOR EDUCATIONAL RESEARCH AND DEVELOPMENT
1855 FOLSOM STREET • SAN FRANCISCO, CALIFORNIA 94103 • (415) 565-3000

I200579I

CONTENTS

INTRODUCTION 1

CROSS STUDY ISSUE SYNTHESIS 6

CONCLUSIONS AND IMPLICATIONS 10

Policy Implications 10

Management Implications 11

Research Implications 13

CONCLUSIONS AND IMPLICATIONS

We have drawn two key conclusions from this synthesis:

1. Some form of personal intermediary or linkage is essential to the dissemination process.
2. A relatively comprehensive yet flexible external support system is needed to provide crucial materials and in-person utilization assistance.

From these conclusions and the findings on which they are based, implications can be derived for dissemination-related policy, administration/management, and research and evaluation.

Policy Implications

1. The wide scale dissemination and utilization of relevant new knowledge requires considerably more time and resources than many planners previously have anticipated. It is clear that educational dissemination, to have much utilization impact, is an extremely complex and costly undertaking. This synthesis has pointed out the socio/political/institutional nature of schools and the time and effort apparently required to bring about-oriented utilization of new knowledge. For both technical (content) and institutional (social) reasons, the organization of school bureaucracies offers little advantage to the dissemination process. Top-down strategies consistently fail, and direct infusion of capacity-building resources such as grants and seed money has unpredictable consequences. On the other hand, strategies involving well-informed intermediaries with access to relevant resources (e.g., technical assistance, materials, and perhaps enabling funds) have highly predictable and usually quite strong consequences.

2. In turn, the increased time and resources needed suggest that a requirement exists for some central process by which the relevance of new knowledge can be established, utilization priorities can be set, and the level of support for dissemination can be determined. Whether or not policy makers choose to make explicit their dissemination priorities, decisions as to what new knowledge to include in any dissemination system will be required. Their decisions will serve to establish such priorities. On the other hand, conscious and deliberate establishment of dissemination priorities would be expected to exert a direct influence on intermediaries and on subsequent patterns of dissemination and utilization. Although clients (schools) require opportunities for choice, they seek and respond to priorities set at higher levels of institutional authority.

3. Some form or system of intermediaries or knowledge linkers should be established. Such a linker-based knowledge dissemination system may have much in common with the USDA Extension Agent system, but because of differences in several key parameters (e.g., school organizations vs. farmers; the nature of educational vs. agricultural knowledge being disseminated and utilization requirements; the nature of impacts and evidence), it is probably unwise to emphasize this analogy. Most likely, the value of the agriculture extension model will be in the organization of intermediaries within an overall dissemination system. Recommendations for the design of such a system are beyond the scope of this report, but could well be informed by this synthesis.

Administration/Management Implications

1. Effective operations seem to depend on a balance between size and organizational complexity. Small is better: organizational diversification or departmentalization seems counterproductive.

2. Requirements for recruitment, selection, and training of personnel seem to depend largely on personal referral networks, self-election and socialization to a particular project.
3. Sophistication in materials development may represent a critical skill in effective intermediary programs.

Guidelines for an Effective Dissemination/Utilization Program

Based on our review, analysis, and synthesis of findings from major studies of dissemination programs, we have prepared recommendations which should improve the practical effectiveness of such programs.

(a) Identify and gain access to potential clients through the personal referral networks and informal communication channels existent in the client social system.

(b) Use in-person communications with accompanying hard copy materials.

(c) Attend to and differentiate the organizational/bureaucratic nature of useful information and assistance from one level to another.

(d) Direct the primary point of entry at the organizational level most proximal to the intended locus of influence; teachers should receive information and assistance directed to teachers, not administrators, and vice versa.

(e) Provide for and secure prior informed concurrence of all administrative levels above the level of primary entry.

(f) Make use of intermediaries who are most homophilous with the client subculture: teachers identify best with other teachers; parents work best in influencing parent involvement, etc.

(g) Ensure that all transactions between the intermediary and the client are coherent and coordinated with the general goals of the dissemination program. It is essential for the intermediaries to have their

"act together" and that all transactions are well coordinated across intermediaries and in the client organization.

(h) Provide opportunities for choice in content and style of client involvement.

(i) Focus on a limited number of clients, at least 25% fewer than can be accommodated comfortably at one time, so that the intensity of transactions will be increased and the incidence of problems will be under more direct control of the intermediary.

(j) Place early emphasis on the philosophy and ideology of the information, products or services being disseminated to indicate the personal and professional advantages to the client.

(k) Make early use of concrete experiences, assignments, materials, and relevant utilization activities which directly involve the client.

(l) Plan to provide repeated in-person transactions with the client staff throughout the project or program, in order to sustain client motivation and involvement.

(m) Anticipate that utilizations involving some form of implementation process will be gradual and cumulative.

Research Implications

1. The most critical need is for improved knowledge of the interpersonal referral networks, subcultures, and decision-making structures characterizing all aspects of American school systems.
2. More detailed knowledge is needed about the prerequisites, appropriate training procedures, and materials requirements for developing effective intermediaries.
3. More definitive evidence is needed about the adoption/utilization process and the range and extent of its consequences on school functioning and effectiveness.